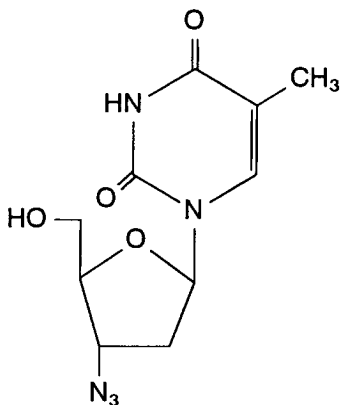


AZT

NSC - 602670



Chemical Name:

3'-Azido-3'-deoxythymidine

Other Names:

Zidovudine; Azidothymidine; Retrovir®; BWA509U

CAS Registry Number: 30516-87-1

Molecular Formula: C₁₀H₁₃N₅O₄

M.W.: 267.28

Approximate Solubility:

(mg/mL)

Water	15
Ethanol	> 20
DMSO	> 20

Stability:**Bulk:**

AZT is stable, as the bulk, at 60 °C for at least 24 hr.

AZT is stable indefinitely at room temperature (25 °C).

Solution:

AZT is stable in DMSO at 45 °C for at least 20 hr.

High Performance Liquid Chromatography:

Column:	IBM Cyano, 250 x 4.6 mm
Mobile Phase:	1% Acetonitrile in water
Flow Rate:	1.0 mL/min
Detection:	UV, 254 nm at 0.1 AUFS
Sample Preparation:	Accurately weighed 1.0 mg samples are each dissolved in 1.00 mL of internal standard solution.
Internal Standard:	Adenosine (1mg/mL).
Retention Volume:	7.4 mL (NSC 602670) 13.5 mL (I.S.)

Optical Rotation:

(c = 1, H₂O)

$$[\alpha]_D^{20} = +49.0 \pm 0.9^\circ \text{ (t=21)}$$

Toxicity Data:

Male rat(po): LD50 = 3.1 g/kg
Burroughs Wellcome Company

Female rat(po): LD50 = 3.7 g/kg
Burroughs Wellcome Company

Male mice: LD50 = 3.6 g/kg
Burroughs Wellcome Company

Female mice(po): LD50 = 3.1 g/kg
Burroughs Wellcome Company